

Attorney Docket No. LVIP:112US
U.S. Patent Application No. 10/709,871
Reply to Office Action of August 10, 2006
Date: January 10, 2007

Amendments to the Drawings

The attached sheet of drawings includes changes to Figs. 1-5. These sheets replace the original sheets that included Fig. 1-5. The figures have been changed as follows:

Figure 1: designated as "Prior Art"

knife edge 22 designated as 21

Figure 2: stereomicroscope 10 designated as 20

Figure 3: stereomicroscope 10 designated as 20

knife 14 designated as 15

curved rigid guide designated as 33

Figure 4: stereomicroscope 10 designated as 20

knife 14 designated as 15

curved rigid guide designated as 33

pinion designated 30 as in Figure 3

scale 26a added to knob 26

Figure 5: segment 34 labeled

rigid guide 33 labeled

Attachment: Replacement Sheets

Remarks

Certified Copy of Priority Document

The Examiner noted that the instant application claims foreign priority based on German patent application DE 10325944.9 filed June 7, 2003. In Appendix II of this Reply, Applicants hereby submit a certified copy of the German priority document.

Objections to the Drawings

The Examiner objected to Figure 1 for not being designated "Prior Art". In Appendix I, Applicants are submitting an amendment to Sheet 1 in which Figure 1 is designated as Prior Art. The amended Sheet is labeled as "Replacement Sheet." Applicants respectfully request acceptance of the amendment to Figure 1 and withdrawal of the objection to Figure 1.

The Examiner objected to the drawings for failing to comply with 37 CFR § 1.84 (p) (4) because reference number 22 had been used to designate both the knife of the present invention and the knife of the prior art. A similar objection was made to reference number 10 referring to distinct stereomicroscopes. Applicants have amended Figure 1 by changing reference number "22" to "21". In Figures 2-4, reference number 10 has been changed to "20". In addition, Applicants have amended Figures 3 and 4 by changing reference number "14", designating a knife, to reference number "15". Applicants respectfully request acceptance of these amendments to Figures 1-4 and withdrawal of the objections under 37 CFR § 1.84 (p) (4).

The Examiner objected to the drawings under 37 CFR § 1.121 (d) as being blurry and not clear. With this Reply, Applicants are submitting Replacement Sheets with new clear figures. The Replacement Sheets *per se* introduce no new matter. Applicants respectfully request acceptance of these amendments to Sheets 1-3 and withdrawal of the objections under 37 CFR § 1.121 (d).

The Examiner objected to the drawings under 37 CFR § 1.83 (a) because they failed to show the rigid guide described in paragraph 0028 in the specification. Applicants respectfully submit that the rigid guide was depicted in the original drawings but was not designated with a

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reference number. Figures 3-5 have been amended by designating the rigid guide with reference number "33". Appropriate changes have been made in amendments to the specification. Applicants respectfully submit that because the rigid guide was depicted in the drawings as originally filed, this assignment of a reference number does not introduce new matter. Applicants respectfully request acceptance of these amendments to Figures 3-5 and withdrawal of the objections under 37 CFR § 1.83 (a).

New Claim

Applicants are submitting new Claim 13 with this Reply. Claim 13 claims a particular embodiment of the claimed cutting apparatus supported in the specification. New Claim 13 introduces no new matter. Applicants respectfully request acceptance of new Claim 13 into the record and allowance of that claim.

Amendments to the Specification

Applicants have amended paragraphs 0017-0020 and 0022 to incorporate the reference number changes for elements described in those paragraphs and depicted in amended Figures 1-5. Applicants respectfully submit that the amendments to the specification introduce no new matter and request acceptance of these amendments to the specification.

Applicants have amended paragraph 0026 to indicate the addition of a scale on knob 26 included in amended Figure 4. Because the scale was originally described in paragraph 0026 as originally filed, Applicants respectfully submit that this amendment adds no new matter.

The §112, first paragraph Rejections of Claims 2-5 and 10

The Examiner rejected Claims 2-5 and 10 under 35 U.S.C. § 112, first paragraph for failing to comply with the enablement requirement stating that the rejected claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with it is most nearly connected, to make and/or use the

invention. Specifically, the Examiner stated that the positioning of the detents, and their interaction with the pivoting device was not discussed in the specification, shown clearly in the drawings, or described in sufficient detail in the claims to enable one of ordinary skill in the art to make the claimed invention or use the claimed method. Applicants respectfully traverse these rejections and request reconsideration.

Applicants respectfully point out that Claims 2-5 depend directly or indirectly from Claim 1 and thus incorporate all the elements of Claim 1. Thus, Claims 2-5 claim a cutting apparatus in which the pivoting device is provided with a positioning device to position the pivoting device at a defined angle. The pivoting device is designated by reference number 28 in paragraph 0020 and is described as having a pinion 30 in Figure 3. The rotation of pinion 30 is described as causing toothed rack 32 to move in a curved motion. Paragraph 0016 describes Figure 3 as depicting a section through the pivoting device. Therefore, Figure 3 shows the inside of pivoting device 28 with the rack 32 and pinion 30 positioning system interacting with the pivoting device 28 by positioning the pivoting device through the movement of rack 32. (*See The New American Oxford Dictionary*, published in 2001 which defines a rack as a cogged or toothed bar or rail engaging with a wheel or pinion, or using pegs to adjust the position of something.") Rack 32 is shown in Figure 3 as attached to segment 34.

In paragraph 0021, positioning is described as "accomplished correspondingly by way of a detent-stopped further motion of segment 34." As noted above, rack 32 is seen in Figure 3 as attached to segment 34. Paragraph 0022 describes the detent element 41 as including a ball pushed by a spring into a groove. Paragraph 0022 and Figure 5 describe one embodiment of a detent in which ball 42 is shown resting in groove 46. Applicants submit that a person of ordinary skill would know that the detent interacts with segment 34 as the specification describes the motion of segment 34, seen in Figure 3 as attached to the rack, as "detent-stopped."

Because rack 32 is shown in Figure 3 as part of segment 34 of the pivoting device 28, Applicants respectfully submit the instant application provides a person of ordinary skill in the art enough detail to make and use the claimed invention. Applicants respectfully submit that a

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person of ordinary skill in the art, having knowledge of rack and pinion systems and detents would see from Figure 3 that the rack and pinion system described in the specification is attached to the movable segment 34 of the positioning device 28 and that from paragraph 0022 and Figure 5 of the specification, the detent would fit into a groove on the movable segment 34 that is attached to the rack 32 thereby creating the “detent-stopped” motion of segment 34. Applicants respectfully submit that the specification and figures of the instant application, either alone or combined with the knowledge of a person of ordinary skill in the art, provides enough detail to enable that person of ordinary skill to make and use the inventions claimed in Claims 2-5. Applicant(s) respectfully request reconsideration and withdrawal of this rejection of Claims 2-5 and 10 under §112, first paragraph.

The Examiner also rejected Claims 2-5 and 10 under §112, first paragraph as based on a disclosure that is not enabling. Specifically, the Examiner states that the rigid guide is not essential to the practice of the invention, namely the detent system, but is not referenced in the drawings or put forth in the claims. Applicants have amended Figures 3 and 4 to specifically point out the rigid guide and have amended Claim 1 to include the rigid guide. Applicants respectfully traverse this rejection and request reconsideration.

The rigid guide is referenced by reference number 33 in amended Figures 3 and 4. The specification has also been amended to reflect the addition of this specific reference to the rigid guide. Applicants note that this structure was depicted in the drawings as originally filed. Additionally, Applicants point to paragraph 0020 which describes segment 34 as “displaced within its guide.” (Emphasis added.) As noted above, Figure 3, which includes a section through the pivoting device, shows segment 34 within an outer shell designated in amended Figure 3 by reference number 34. In addition, paragraph 0022 states the detent element 41 “can be arranged on the rigid guide.” Thus, Applicant respectfully submits that the amendments to the drawings and specification do not add new matter but only specifically reference a structure depicted in the drawings and described in the specification that were as originally filed.

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Applicants have amended Claim 2 to claim the invention in which the detent element is mounted on the curved rigid guide enclose the pivoting device. Support for this amendment is found in paragraph 0022 and thus does not introduce new matter. Applicants respectfully request reconsideration and request withdrawal of this rejection under § 112, first paragraph.

The § 112, second paragraph Rejections of Claims 1, 5, 6, and 9

The Examiner rejected Claims 1, 5, 6, and 9 under 35 U.S.C. § 112, second paragraph as indefinite for claiming a broad range together with a narrow range.

Regarding Claims 1 and 9, the Examiner states that the broad recitation “an observation device” and the narrower element “a stereo microscope” are claimed together. Applicants have amended Claims 1 and 9 by deleting the “a stereo microscope” from those claims. Similarly, Claim 6 is rejected for reciting the broad element “position marking” together with the narrower recitation “scale”. Applicants have amended Claim 6 by deleting the narrower “scale” element. Applicants respectfully request reconsideration and withdrawal of the § 112, second paragraph rejections of Claims 1, 6, and 9.

Claim 5 was rejected by the Examiner was rejected under 35 U.S.C. § 112, second paragraph as being unclear in identifying how the rotary knob comprises a detent element. Applicants have amended Claim 5 to clarify and claim the actual disclosed arrangement of the invention of Claim 5. Support for this amendment is found in paragraph 0024 of the specification.

The § 102 (b) Rejections of Claims 1, 9, and 12

The Examiner rejected Claims 1, 9, and 12 under 35 U.S.C. § 102 (b) as anticipated by U.S. Patent No. 3,103,844 to Persson (“Persson ‘844” or “the Persson ‘844 patent”). Applicants have cancelled Claim 12 thereby rendering the rejection of that claim moot. Claims 1 and 9 have been amended. Applicants respectfully traverse the rejection of amended Claims 1 and 9 and request reconsideration.

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“A claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described in a single prior art reference.” *Vandergaal Bros. v. Union Oil of California*, 814 F.2d 628, 631; 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). MPEP § 2131. (Emphasis added.) Applicants respectfully traverse the Examiner’s statement that the element 9 in Persson ‘844 is a positioning device as claimed in Claims 1 and 9 and described in the instant specification. Persson ‘844 describes element 9 as a trunnion which is a pin or pivot around which something rotates. As can be seen in the Figure of the Persson ‘844 patent, trunnion 9 is only disclosed as a simple pin around which first cranked arm 10 rotates. Pin 9 in no way enables a user to stop or otherwise act to position arm 10 at any one particular point or plurality of points within the rotational arc of arm 10. In fact, the Persson ‘844 patent appears not to disclose any particular element of the disclosed microtome that will hold arm 10 or arm 23 in a particular position or angle. Applicant notes the Examiner’s statement that any angle the pivot moves to is defined at least since all the angles are measurable. However, the Persson ‘844 patent does not disclose any method or device for such angle measurement nor does it teach or suggest the need to measure an angle. In addition, as pointed out above, the pivot pin in Persson ‘844 does not enable a user to position, that is hold or maintain, the crank arm 10 or arm 23 at a particular angle.

In contrast, the instant application discloses a particular positioning device that will hold pivot device 28 and thus the stereomicroscope at a particular or defined angle as is claimed in Claim 1 and Claim 9. Thus, Persson ‘844 fails to anticipate Claims 1 and 9 under § 102 (b) as it fails to explicitly disclose a device that will position the pivoting device and thus the stereomicroscope at a defined angle. Applicants respectfully request reconsideration and allowance of Claims 1 and 9.

The § 103 (a) Rejections of Claims 2-5, 7, 8, 10, and 11

The Examiner rejected Claims 2-5, 7, 8, and 10 under 35 U.S.C. § 103 (a) as obvious over the Persson '844 patent in view of U.S. Patent No. 3,908,878 to Blum ("Blum" or "the Blum patent"). Applicants have cancelled Claim 7 thereby rendering the rejection of that claim moot. Applicants respectfully traverse the rejections of Claims 2-5, 8, and 10 and request reconsideration.

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. In addition, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). First, Applicants respectfully point out that nowhere in either the Persson '844 patent or in the Blum patent is the use of a curved rigid guide taught or suggested as is claimed in Claims 2, 8, and 10. Persson '844 has no guide at all for a pivoting device to move through in addition to lacking any positioning device that holds or positions a device at a defined angle. Regarding the Blum patent, it also lacks the curved rigid guide noted by the Examiner as essential to the claimed invention. Although the detent interacts with the recesses on the shaft 288 in Blum, shaft 288 is straight, not curved. Moreover, like Persson '844, there is no suggestion in Blum to modify the shaft to make it curved. Therefore, for this first reason, the combined Persson '844 and Blum references fail to establish a *prima facie* case of obviousness against Claims 2, 8, and 10 as they fail, either separately or together, to teach or suggest all the elements of those claims, namely a curved rigid guide that encloses the pivoting device.

Second, Applicants respectfully point out that the Blum patent is directed to a device that is used in fabricating glass microtome blades which requires the use of force directed in a straight vector. Applicants respectfully submit that the use of detent devices in a straight shaft

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for making microtome blades does not suggest the use of detents as a positioning device in a curved rigid guide as part of a pivoting device that moves a stereomicroscope in a curved direction. Applicant respectfully submit that the field of making blades is not the same field as moving a stereomicroscope through an arc or curved direction and holding it in position. Thus, for this second reason, Applicants respectfully submit that the combined Persson '844 and Blum references fail to render Claims 2, 8, and 10 obvious. Applicants respectfully request reconsideration and allowance of Claims 2, 8, and 10.

"If an independent claim is nonobvious under 35 U.S.C. §103, then any claim depending therefrom is nonobvious." *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596 (Fed. Cir. 1988). Claims 3-5 depend from Claim 2 and thus incorporate all the limitations of that claim. Because, as discussed above, the Persson '844 and Blum patents fail to render obvious Claim 2, they also fail to render obvious Claims 3-5. Applicants respectfully request the removal of the rejections of Claims 3-5 and allowance of those claims.

The Examiner rejected Claim 6 under 35 U.S.C. § 103(a) as obvious over Persson '844 in view of U.S. Patent No. 3,405,578 to Persson ("Persson '578). Applicants have amended Claim 6 to claim the device in which the scale is disposed on a knob from the positioning device. Applicants respectfully traverse this rejection of Claim 6 as amended and request reconsideration.

First, Applicants respectfully point out that Claim 6 depends from Claim 1 and thus incorporates all the elements of that claim. In this regard, Applicants respectfully submit that Persson '578, like Persson '844, fails to teach or suggest a pivoting device that pivots an observation device and includes a positioning device that positions the observation device at a defined angle. As seen in Persson '578, the scales shown in Figure 3 are used to measure the cutting angle of the blade. One scale measures rotation of the microscope, but describes the microscope only as rotating around an axis coinciding with the cutting edge. There is no suggestion provide to rotate the microscope and hold it in a position other than the position

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coinciding with the cutting edge. To rotate the microscope out of the plane of the cutting edge would lessen or eliminate the effectiveness of invention disclosed in the Persson '578 patent. In contrast, a comparison of Figures 3 and 4 shows the pivoting movement of stereomicroscope 20 to different positions in relation to cutting edge 22. For this reason, the combined Persson '844 and '578 patents fail to establish a *prima facie* case of obviousness against Claim 6. Applicants respectfully request reconsideration and allowance of Claim 6.

The Examiner rejected Claim 11 under 35 U.S.C. § 103 (a) as obvious over Persson '844 in view of Persson '578. Applicant respectfully traverses this rejection and requests reconsideration.

Claim 11 is a method claim depending from Claim 9 and thus incorporates all the elements of Claim 9. Claim 9 and Claim 11 thus each claim a method of presetting a cutting device in which a positioning device is provided in which the position of the observation device is accomplished or measured to a preset angle defined by detents on the positioning device. Neither the Persson '844 patent nor the Persson '578 patent teach or suggest a detent device of any type to measure or define a preset angle for the observation device. Thus the combined Persson '844 and '578 patents fail to render Claim 11 as they fail to teach or suggest the use of detents to set or determine the defined angle of the observation device. Applicants respectfully request reconsideration and allowance of Claim 11.

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Conclusion

Applicants respectfully submit that the present application is now in condition for allowance, which action is courteously requested. The Examiner is invited and encouraged to contact the undersigned attorney of record if such contact will facilitate an efficient examination and allowance of the application.

Respectfully yours,



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